

REMARKS

Applicant intends this response to be a complete response to the Examiner's 24 July 2008, Final Office Action. Applicant has labeled the paragraphs in his response to correspond to the paragraph labeling in the Office Action for the convenience of the Examiner.

DETAILED ACTION

Response to Amendment

The Examiner states as follows:

1. Examiner acknowledges Applicant's response filed 6 March 2008 containing amendments to the claims and remarks.
2. Claims 1-35 are pending.
3. The previous rejections of claims 1, 7-18, 20-22, and 27 under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) are maintained.
4. New grounds for rejection of claims 1, 18, 28, and 31, necessitated by Applicant's amendment to the claims, are entered under 35 U.S.C. 112, second paragraph.
5. New grounds for rejection of claims 28-35, necessitated by Applicant's amendment to the claims, are entered under 35 U.S.C. 102(b) and 35 U.S.C. 103(a).
6. Finally, allowable subject matter is indicated with respect to claims 2-6, 19, and 23-26. The rejections follow.

Applicants acknowledge the Examiner's statements and thank the Examiner; of course, Applicants hoped to have gotten the entire case allowed.

Claim Rejections - 35 USC § 112

8. Claims 1, 18, 28, and 31 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Examiner contends as follows:

9. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question- or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 1, 18, 28, and 31 all recite the broad recitation "so that the resulting adducts comprise amines bonded to three different groups," and the claims also recite "where two of the groups can be a part of a ring structure" (emphasis added) which is the narrower statement of the range/limitation.

Applicants have incorporated the allowable subject matter of claim 2 into claims 1, 18, 28 and 31, rendering this rejection moot. Applicants, therefore, respectfully request withdrawal of this rejection.

Claim Rejections - 35 USC § 102 / 35 USC § 103

12. **Claims 1, 7-18, 20-22, and 27-35** stand rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yon-Hin (EP 0882778 A2).

The Examiner contends as follows:

13. With respect to claims 1 and 18, Yon-Hin discloses contacting a fluid including noxious sulfur-containing species with an effective amount of a sulfur scavenging composition comprising substantially monomeric aldehyde-amine adducts formed from a reaction of a molar excess of an aldehyde or aldehyde donor and a secondary amine having at least one sterically bulk substituent where the resulting adduct comprises amines bonded to three different groups (see Yon-Hin, page 4, Example 1).

Applicants have incorporated the allowable subject matter of claim 2 into claims 1, 18, 28 and 31, rendering this rejection moot. Applicants, therefore, respectfully request withdrawal of this rejection.

The Examiner contends as follows:

14. With respect to claim 19, Yon-Hin discloses the use of aldehyde and amine species to produce a sulfur scavenging composition (see Yon-Hin, page 4, Example 1; page 3, lines 12-58; and page 4, lines 1-8).

Applicants have incorporated the allowable subject matter of claim 2 into claims 1, 18, 28 and 31, rendering this rejection moot. Applicants, therefore, respectfully request withdrawal of this rejection.

The Examiner contends as follows:

15. With respect to claims 7 and 27, Yon-Hin discloses wherein the composition comprises a solution including a quantity of adducts and the remainder a solvent (see Yon-Hin, page 4, Example 1).

Applicants have incorporated the allowable subject matter of claim 2 into claims 1, 18, 28 and 31, rendering this rejection moot. Applicants, therefore, respectfully request withdrawal of this rejection.

The Examiner contends as follows:

16. With respect to claims 8-17, Yon-Hin discloses wherein the fluid is *any* hydrocarbon stream (see Yon-Hin, Abstract; page 2, lines 3-5; and page 4, lines 9-13).

Applicants have incorporated the allowable subject matter of claim 2 into claims 1, 18, 28 and 31, rendering this rejection moot. Applicants, therefore, respectfully request withdrawal of this rejection.

The Examiner contends as follows:

17. With respect to claims 20-22, Yon-Hin discloses wherein the adding step may be continuous, intermittent, or periodic (see Yon-Hin, page 4, lines 13-16; and Example 4).

Applicants have incorporated the allowable subject matter of claim 2 into claims 1, 18, 28 and 31, rendering this rejection moot. Applicants, therefore, respectfully request withdrawal of this rejection.

The Examiner contends as follows:

18. With respect to claims 28 and 29, Yon-Hin provides an inherent disclosure for contacting a sulfur scavenging composition *in a container*. Yon-Hin does not explicitly disclose use of a "container." Nevertheless, the person having ordinary skill in the art would recognize from Yon-Hin's disclosure that use of some sort of container is necessary to hold the sulfur-containing hydrocarbon to be treated by the sulfur scavenging composition. Likewise, the person having ordinary skill in the art would recognize that the sulfur scavenging composition could be added (or "contacted") with the hydrocarbon either prior to, after, or at the same time as adding the hydrocarbon to the "container."

Applicants have incorporated the allowable subject matter of claim 2 into claims 1, 18, 28 and 31, rendering this rejection moot. Applicants, therefore, respectfully request withdrawal of this rejection.

The Examiner contends as follows:

19. With respect to claim 30, Yon-Hin discloses a sulfur scavenging composition comprising a solution including from about 5 wt.% to about 50 wt.% of the adducts, the remainder being a solvent (see Yon-Hin, page 4, lines 14-16).

Applicants have incorporated the allowable subject matter of claim 2 into claims 1, 18, 28 and 31, rendering this rejection moot. Applicants, therefore, respectfully request withdrawal of this rejection.

The Examiner contends as follows:

20. With respect to claim 31, Yon-Hin discloses contacting a sulfur scavenging composition with a hydrocarbon containing hydrogen sulfide (see Yon-Hin, page 4, lines 9-16).

Applicants have incorporated the allowable subject matter of claim 2 into claims 1, 18, 28 and 31, rendering this rejection moot. Applicants, therefore, respectfully request withdrawal of this rejection.

The Examiner contends as follows:

21. With respect to claims 32-34, Yon-Hin provides an inherent disclosure for introduction of a sulfur scavenging composition via a chemical tool, coiled tubing, or capillary coiled tubing (CCT). Yon-Hin does not provide an explicit disclosure for the means by which the sulfur scavenging

composition is added to the sulfur-containing hydrocarbon to be treated. Nevertheless, the person having ordinary skill in the art would recognize that any suitable means could be used, be it by pouring (i.e. "batch introducing step"), by pumping the composition through a pipe, or other "chemical tool," "coiled tubing," or "capillary coiled tubing (CCT)."

Applicants have incorporated the allowable subject matter of claim 2 into claims 1, 18, 28 and 31, rendering this rejection moot. Applicants, therefore, respectfully request withdrawal of this rejection.

The Examiner contends as follows:

22. With respect to claim 35, Yon-Hin discloses a sulfur scavenging composition comprising a solution including from about 5 wt.% to about 50 wt.% of the adducts, the remainder being a solvent (see Yon-Hin, page 4, lines 14-16).

Applicants have incorporated the allowable subject matter of claim 2 into claims 1, 18, 28 and 31, rendering this rejection moot. Applicants, therefore, respectfully request withdrawal of this rejection.

Allowable Subject Matter

The Examiner states as follows:

23. Claims 2-6, 19, and 23-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

24. The following is Examiner's statement of reasons for allowance:

With respect to claims 2-6, 19, and 23-26, Yon-Hin does not disclose or suggest a method of reducing or substantially eliminating a noxious sulfur-containing species in a fluid, the method comprising contacting the fluid with a composition comprising substantially monomeric aldehyde-amine adducts as defined by formulas (I) and (II) of Applicant's claims 2 and 19, "where the CH_2R groups are derived from at least one aldehyde" (see Applicant's claims 2 and 19). In contrast, the composition disclosed by Yon-Hin is an adduct containing terminal CH_2R groups derived from the *amine* reactant and thus *not* "derived from at least one *aldehyde*" as required by Applicant's claims 2 and 19 (from which claims 3-6 and 23-26 respectively depend). Thus, Applicant's claims 2-6, 19, and 23-26 are patentable over Yon-Hin.

Applicants acknowledge and thank the Examiner.

Response to Arguments

The Examiner states as follows:

25. Applicant's arguments filed 6 March 2008 have been fully considered but they are not persuasive.

26. Examiner understands Applicant's principal arguments to be:

- I. Yon-Hin does not disclose an aldehyde-amine adduct comprising a reaction of a single aldehyde and a single amine.
- II. Yon-Hin relates to compositions comprising two amines linked together by at least two aldehyde derived units.

27. With respect to Applicant's first argument, Yon-Hin very clearly discloses an aldehyde-amine adduct (for example, "1,w-bis-[N,N-dibutylamino]-poly(methylenoxy)-methylene") formed from the

reaction of a single aldehyde (for example, "paraformaldehyde") and a single amine (for example, "dibutylamine") (see Yon-Hin, Example 1).

28. With respect to Applicant's second argument, such argument fails to comply with 37 CFR 1.111(b) because it amounts to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicants acknowledge the Examiner's statements.

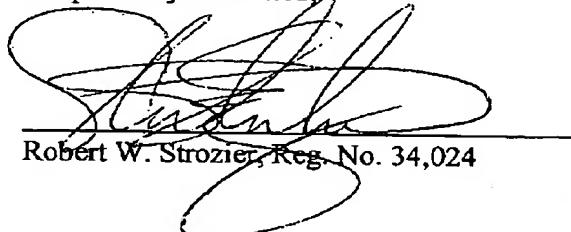
Having fully responded to the Examiner's Non-Final Office Action, Applicant respectfully urges that this application be passed onto allowance.

If it would be of assistance in resolving any issues in this application, the Examiner is kindly invited to contact applicant's attorney Robert W. Strozier at 713.977.7000

The Commissioner is authorized to charge or credit Deposit Account 501518 for any additional fees or overpayments.

Respectfully submitted,

Date: November 3, 2008


Robert W. Strozier, Reg. No. 34,024